

Work Order ID 141799

February 11, 2016 1:58:11 PM

646.9701

B 141799

REV. C

141799

Required for next week

Page 1

Item ID: 646.9701

Revision ID:

Item Name: Cutter Sub Assembly

Start Date: 2/11/2016 Start Qty: 5.00

Required Date: 2/15/2016 Req'd Qty: 5.00

Reference:

Accept

N9000040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Customer:

Approvals:

Process Plan: SU

Date: 20160211

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

646.9700

C (ECN)

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

SX 16/02/12 DAS 36 9-89

120

0.00

120

Small Fab

Memo

0.02

Small Fab

Assemble as per dwg and apply loctite 598 on all faying surfaces per note.

A/R RTV LOCTITE 598: 133436
exp. date: 07/17

SX 16/02/16 DAS 36 9-89

130

QC5- Inspect part completeness to step on W/O

0.00

130

QC

Memo

0.00

Quality Control

5 FEB 16 2016 DAS 38 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Work Order ID 141799

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141799

Page 2

Item ID: 646.9701

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Cutter Sub Assembly

Stop

NS2

Start Date: 2/11/2016 Start Qty: 5.00

5

Cust Item ID:

Required Date: 2/15/2016 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
StampDAS
36
9-89

140

Identify as per dwg & Stock Location G-A

0.00

140

Packaging

Memo

0.00

Packaging

IDENTIFY AS PER IAW MPP-120

SK16/02/16

150

QC21 - Final Inspection - Work Order Release

0.00

150

QC

Memo

0.01

Quality Control

MCJ

FEB 17 2016

MCJ

FEB 17 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :			
Misidentified	☐	Past Due	☐				

Picklist Print

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Page 1

Work Order ID: 141799

141799

Parent Item: 646.9701

646 9701

Parent Item Name: Cutter Sub Assembly

Start Date: 2/11/2016

Required Date: 2/15/2016

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP REV:A 12.08.13 NEW ISSUE DD VERF:JFS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
646.9710 *646 9710* Body		Manufactured	No			110	Each	21.0000	1	5		16/02/12	DAS 36 9.89
**													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				CCK013		21							
				127781		4							
				128805		10							
				130854		3							
				98918		4							
646.9711 *646 9711* Blade		Manufactured	No			110	Each	48.0000	2	10		16/02/12	DAS 36 1.89
**													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				CCK106		18							
				128367		5							
				129676		13							
				CCK108A		30							
				138180		30							

Picklist Print

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Page 2

Work Order ID: 141799

Parent Item: 646.9701

Parent Item Name: Cutter Sub Assembly

141799

646.9701

Start Date: 2/11/2016

Required Date: 2/15/2016

Start Qty: 5.00

Required Qty: 5.00

MS21042L08

Purchased

No

110

Each

1,764.000

6

30

MS21042L 08

Nut

★★

DAS
36
9-89

16/02/12

Location

Loc Qty

Loc Code

CA

101

m129682

101

GA

275

m133134

3

m134063

272

OVER007

500

m134063

500

ST303

888

m133922

888

MS27039-08-19

Purchased

No

110

Each

1,057.000

6

30

MS27039-08-19

Screw

★★

DAS
36
9-89

16/02/12

Location

Loc Qty

Loc Code

CCK06

200

m134142

200

GA

106

m132930

84

m133077

22

over006

668

m133483

68

m134063

600

ST277

83

m133769

83

Picklist Print

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Work Order ID: 141799

Parent Item: 646.9701

Parent Item Name: Cutter Sub Assembly

141799

646.9701

Start Date: 2/11/2016

Required Date: 2/15/2016

Start Qty: 5.00

Required Qty: 5.00

NAS1149FN832P

Purchased

No

110

Each

3,065.000

12

60

16/02/12

DAS
36
9-89

NAS1149FN832P

Washer

Location

Loc Qty

Loc Code

GA

1589

M133316

16

M133769

1573

ST262

1476

M133709

1476

60

APICAL

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.

04559

SHEET 1 OF 1

DWG NO. 646.9700

REV: C

PREPARED BY D. MEJIA

DATE: 06/11/2014

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: CUTTER SUB ASSY

APPROVED BY: ENGR

[Signature]

MFG

[Signature]

QC

[Signature]

EFF.

NEXT ORDER

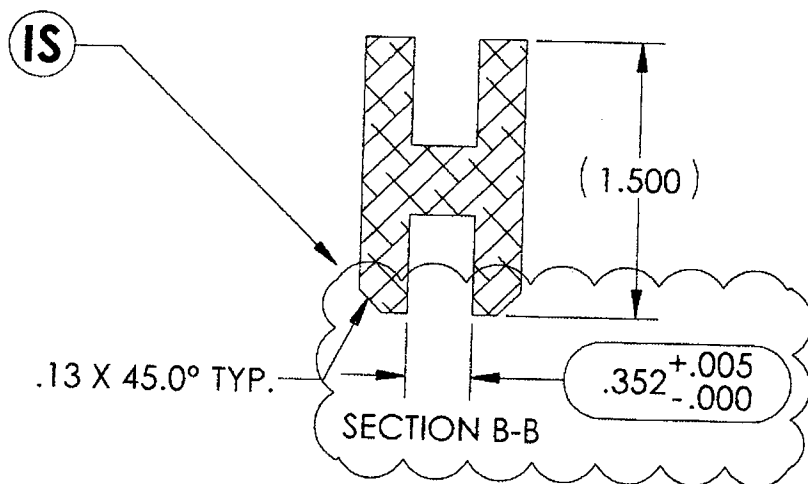
TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

REASON: ADDED DIMENSION AND TOLERANCE

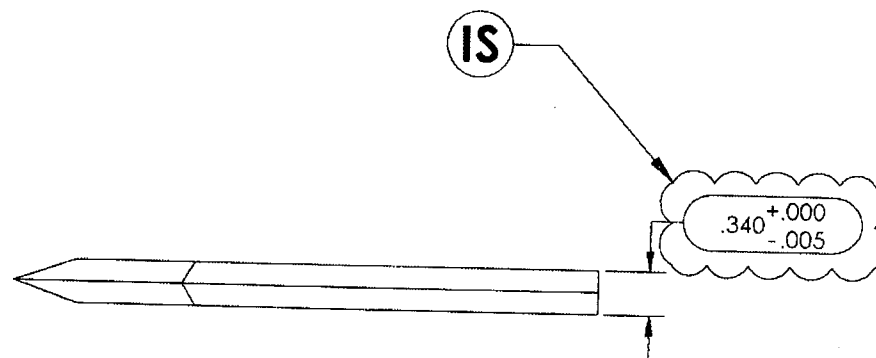
ECR:

D-14-05

SHEET 2, ZONE D7 IS:



SHEET 5, ZONE B5 IS:



20160277

SM 141799.

DOCUMENTS EFFECTED:

☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☐ BOM

CHANGE CATEGORY

☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED

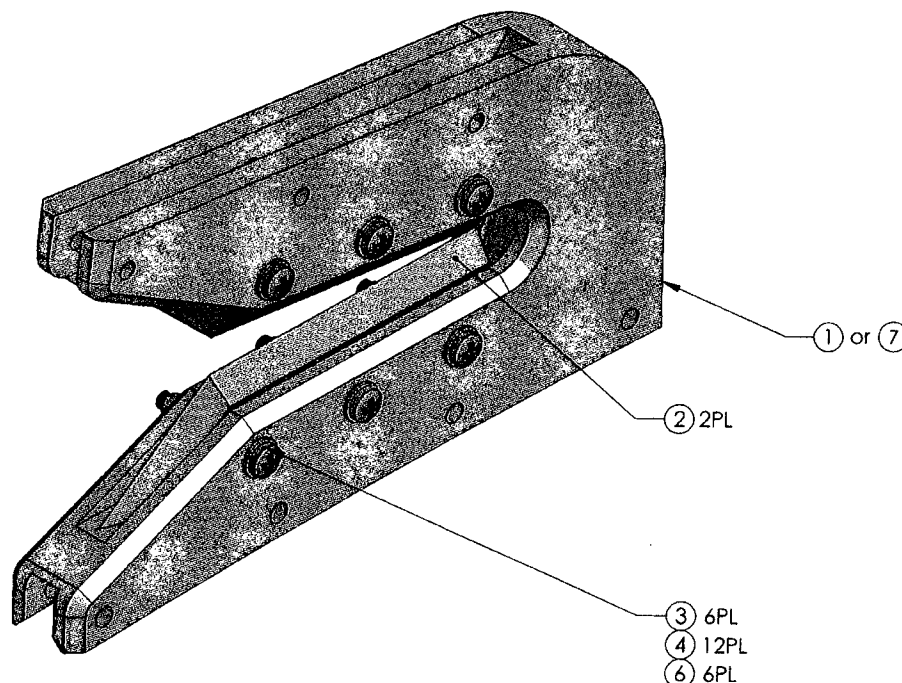
☐ YES ☒ NO

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	LAST PROTOTYPE REVIEW: P22		N/C
2	INITIAL RELEASE	05/25/89	F. BRAVO
3	INCORPORATED ECN 02744, 02838, 03912	06/01/13	F. BRAVO
4	INCORPORATED ECN 03967	07/03/13	F. BRAVO
5	INCORPORATED ECN 04039	08/09/13	F. BRAVO

NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK; PRETREAT PRC-DESOTO PR-148 ADHESION PROMOTER; PRIME IAW MIL-P-23377J TYPE I CLASS N; 1-2 MIL MAX
- 3 MATERIAL: AISI A2 TOOL STEEL
CONDITION: ANNEALED
POST PROCESS: HEAT TREAT TO 58-62 Rc ROCKWELL HARDNESS
- 4 FINISH: PRIME IAW MIL-P-23377J TYPE I CLASS N; 1-2 MIL MAX
- 5 DEBURR AND BREAK ALL SHARP EDGES EXCEPT WHERE OTHERWISE NOTED
- 6 IDENTIFY IAW MPP-120
- 7 APPLY F/N 5 AS REQUIRED TO ALL FAYING SURFACES OF F/N 2 UPON ASSEMBLY
- 8 CUTTING EDGE INTENDED TO BE SHARP, DO NOT BREAK SHARP EDGE
- 9 ALL DIMENSIONS NOT SPECIFIED ARE CONTROLLED BY 646.9710.



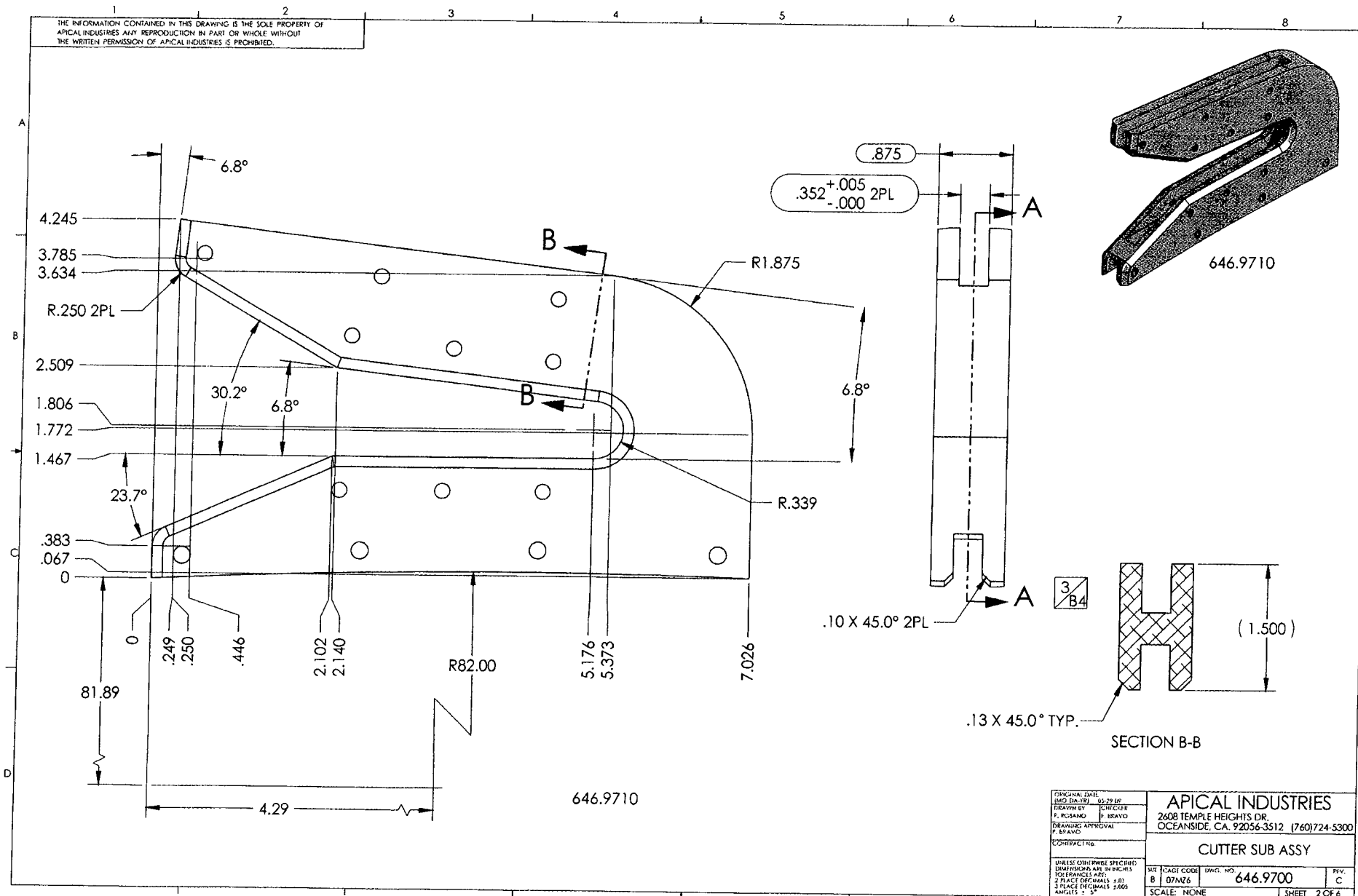
646.9701
or
646.9702

UNINCORPORATED ECN(s)

04559

1	7	646.9712	BODY (U CHANNEL)	△	△
6	6	601.1541	LOCKNUT	MS21042L08	
A/R	A/R	5	601.2764	RTV, LOCITE 598	
12	12	4	601.2764	WASHER	MS114W1832P
6	6	3	601.2765	SCREW	MS27039-0819
2	2	2	646.9711	BLADE	△
1	1	1	646.9710	BODY	△
△	△	△	646.9702	CUTTER SUB ASSY (U CHANNEL)	
△	△	△	646.9701	CUTTER SUB ASSY	
QTY	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.
PARTS LIST					
APICAL INDUSTRIES					
2608 TEMPLE HEIGHTS DR.					
OCEANSIDE, CA. 92056-3512 (760)724-5300					
CUTTER SUB ASSY					
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE: 2 PLACE DECIMALS ± .01; 3 PLACE DECIMALS ± .005; ANGLES ± .5°					
DATE	SCALE	FIGURE	DWG. NO.	REV.	
8	07M26		646.9700	C	
SCALE: NONE				SHEET 1 OF 6	

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ORIGINAL DATE (REV. DATE)	02-29-88	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300			
DRAWN BY	ENGINEER				
F. ROSANO	P. BRAYO				
DRAWING APPROVAL	P. BRAYO				
CONTRACT NO.		CUTTER SUB ASSY			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°					
WTC CODE	REV. NO.			646.9700	REV. C
B 1 07M26					
SCALE: NONE		SHEET 2 OF 6			

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760) 724-5300

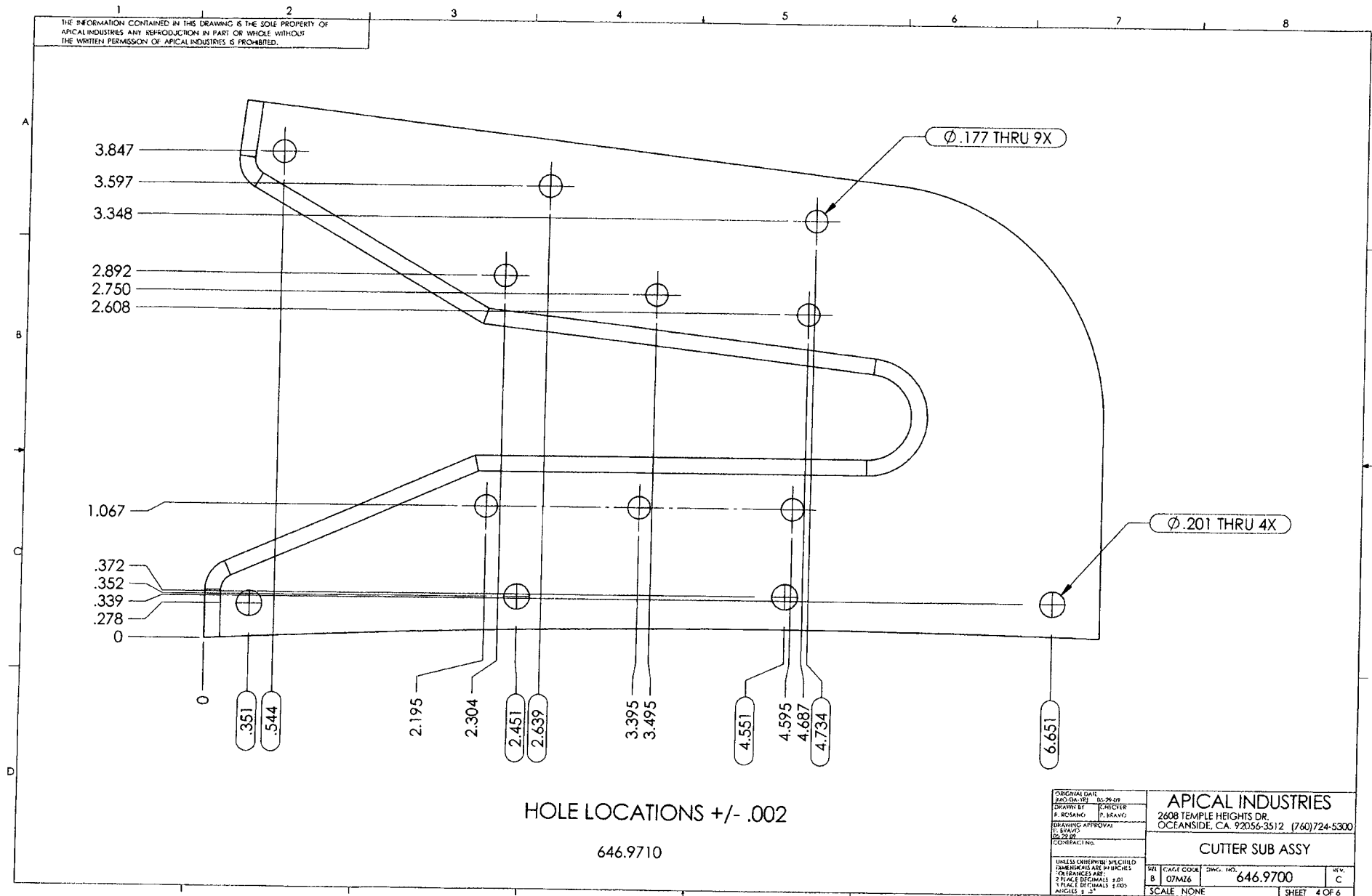
CUTTER SUB ASSY

Technical drawing of a mechanical part, likely a bracket or flange, showing dimensions and a cross-section. The part has a base with four holes and a curved top section with three holes. Dimensions include a base width of 5.500, a base thickness of .560, and a curved section radius of R1.037. A cross-section is shown with a radius of R1.000 and a thickness of .700. Other dimensions include 4.321, 3.972, 3.930, .660, and an angle of 6.8 degrees.

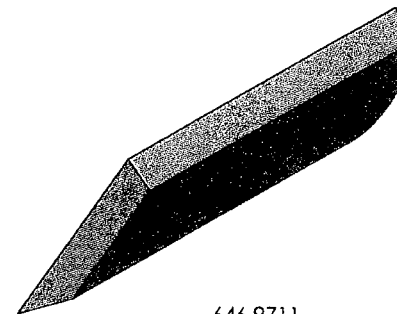
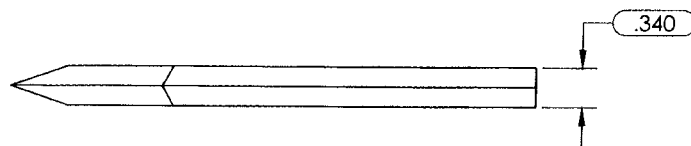
646.9710

ORDERING DATE (MM-DD-YY) DD-YY DRAWN BY C. HENCKE P. POHAR P. SAVO DRAWING APPROVAL P. HENCKE DD-YY CONTRACT NO.	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760) 724-5300			
CUTTER SUB ASSY				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES 1/8" DECIMALS ARE: 1/2" 2" 3" DIMENSIONS ± .01 3 PLACES DECIMALS ± .005 4 PLACES DECIMALS ± .0005	SIZE B	CAGE CODE 07M16	TING NO 646.9700	REV. C
SCALE ANGLE	SCALE NONE SHEET 3 OF 6			

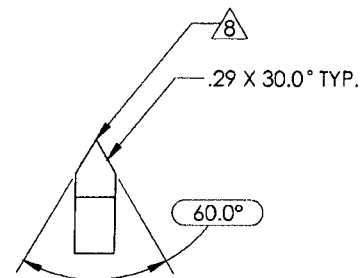
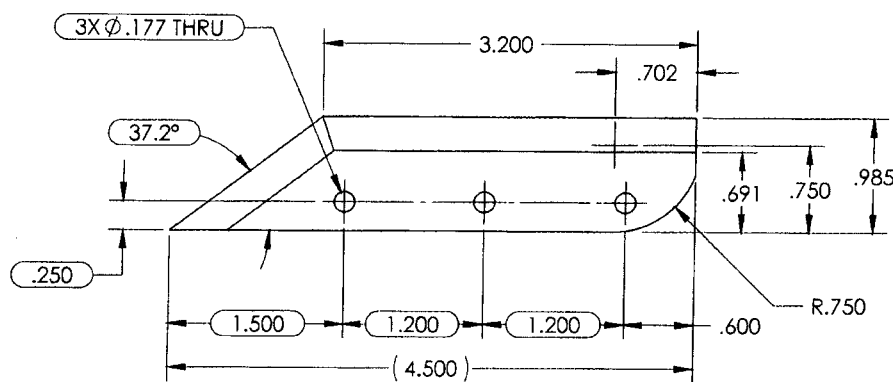
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646.9711

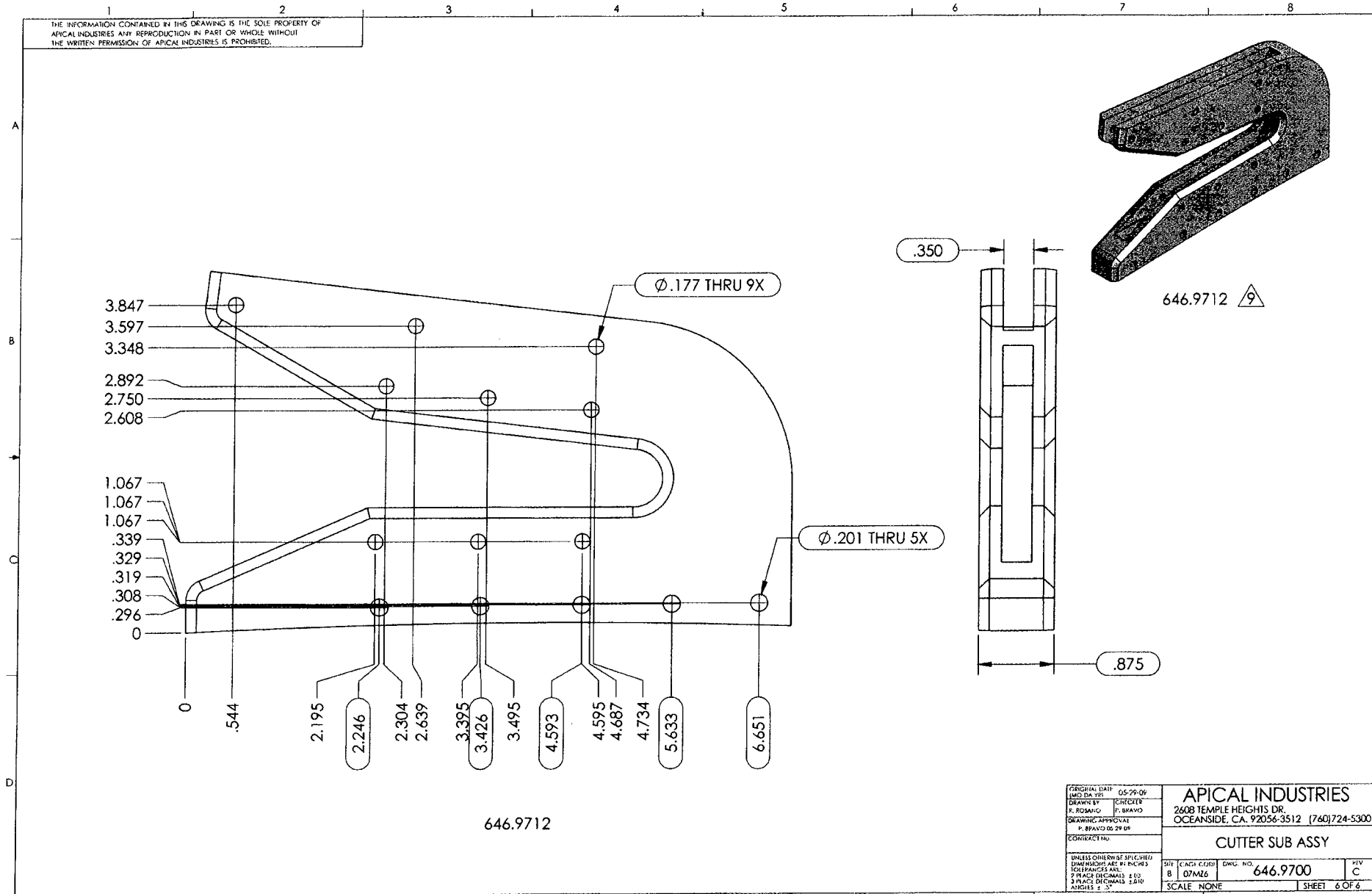


646.9711

ORIGINAL DATE 8/20/84 (18)		66-2940	
DESIGNED BY H. ROSANO		CHECKED H. ROSANO	
DRAWING APPROVAL P. BRAYO		CONTRACT NO.	
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .01 3 PLACE DECIMALS ± .001 ANGLES ± .5°			
REV B		CAGE CODE 07M26	UNQ. NO. 646.9700
SCALE NONE		SHEET 5 OF 6	

APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
CUTTER SUB ASSY	

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ORIGINAL DATE: 05-29-09		APICAL INDUSTRIES	
DRAWN BY: K. ROMAN-G		2608 TEMPLE HEIGHTS DR.	
CHECKED BY: P. BRAVO		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL: P. BRAVO 05-29-09		CUTTER SUB ASSY	
CONTRACT NO.		DWG. NO. 646.9700	
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE: 2 PLACE DECIMALS $\pm .005$ 3 PLACE DECIMALS $\pm .001$ ANGLES $\pm .5^\circ$		SHEET 6 OF 6	REV C
SCALE: NONE			